#### For receiving Office use only International Application No. REQUEST International Filing Date The undersigned requests that the present international application be processed Name of receiving Office and "PCT International Application" according to the Patent Cooperation Treaty. Applicant's or agent's file reference (if desired) (12 characters maximum) PCB/P89103PWO TITLE OF INVENTION Box No. I DNA POLYMERASES This person is also inventor. APPLICANT Box No. II Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) Telephone No. Facsimile No. THE UNIVERSITY OF NEWCASTLE **6 KENSINGTON TERRACE** Teleprinter No. JESMOND NEWCASTLE UPON TYNE, NE1 7RU Applicant's registration No. with the Office State (that is, country) of residence: State (that is, country) of nationality: UNITED KINGDOM UNITED KINGDOM the United States of America only the States indicated in the Supplemental Box all designated States all designated States except the United States of America This person is applicant for the purposes of: FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S) Box No. III Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) This person is: applicant only BERNARD CONNOLLY applicant and inventor School of Cell and Molecular Biosciences inventor only (If this check-box is marked, do not fill in below.) University of Newcastle Newcastle upon Tyne Applicant's registration No. with the Office NE2 4HH State (that is, country) of residence: State (that is, country) of nationality: UNITED KINGDOM UNITED KINGDOM the States indicated in the Supplemental Box the United States of America only all designated States except the United States of America all designated States This person is applicant for the purposes of: Further applicants and/or (further) inventors are indicated on a continuation sheet. AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE The person identified below is hereby/has been appointed to act on behalf common agent X representative of the applicant(s) before the competent International Authorities as: Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.) Telephone No. 0113 389 5600 Facsimile No. DR P. C. BANFORD 0113 389 5601 MARKS & CLERK Teleprinter No. 43 PARK PLACE LEEDS, LS1 2RY Agent's registration No. with the Office UNITED KINGDOM Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

			٠,	
C1 : "T.T "			1	
Sheet No.			_	

Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER	
If none of the following sub-boxes is used, this sheet should not be included in the r	equest.
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)  MARK FOGG	This person is:  applicant only  applicant and inventor
Structural Biology Lab, Department of Chemistry University of York	inventor only (If this check-box is marked, do not fill in below.)
York YO10 5YW	Applicant's registration No. with the Office
State (that is, country) of nationality: UNITED KINGDOM  State (that is, country) UNITED KIN	IGDOM
This person is applicant for the purposes of:  all designated States except the United States of America	of America only the Supplemental Box
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in the Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)	applicant only
LAWRENCE PEARL Centre for Structural Biology	applicant and inventor inventor only (If this check-box is marked, do not fill in below.)
Institute of Cancer Research Chester Beatty Laboratories	Applicant's registration No. with the Office
237 Fulham Road, London, SW3 6JB	atry) of residence:
UNITED KINGDOM UNITED KIN	NGDOM the States indicated in
for the purposes of:	of America only the Supplemental Box
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in the Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)	applicant only
	applicant and inventor inventor only (If this check-box is marked, do not fill in below.)
	Applicant's registration No. with the Office
State (that is, country) of nationality:  State (that is, country)	ntry) of residence:
This person is applicant all designated all designated States except the United States of America	the United States of America only the States indicated in the Supplemental Box
Name and address: (Family name followed by given name; for a legal entity, full official designat The address must include postal code and name of country. The country of the address indicated in Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)	this  This person is:  applicant only  applicant and inventor  inventor only (If this check-box is marked, do not fill in below.)
	Applicant's registration No. with the Office
State (that is, country) of nationality:  State (that is, country)	mtry) of residence:
This person is applicant all designated all designated the United States except the United States of America	the United States of America only the States indicated in the Supplemental Box

Box No. V DESIGNATION OF STATES	Mark the applicable check-boxes below; o	ıt least one müst be marked.
The following designations are hereby made u	ander Rule 4.9(a):	#:
·	• .	
State which is a Contracting State	of the Harare Protocol and of the PCT (if oth	er kind of protection or treatment desired,
EA Eurasian Patent: AM Armenia, A. RU Russian Federation, TJ Tajikisi	Z Azerbaijan, BY Belarus, KG Kyrgyzstan, Kan, TM Turkmenistan, and any other State when	nich is a Contracting State of the Eurasian
Republic, DE Germany, DK Denm IE Ireland, IT Italy, LU Luxembou	Belgium, BG Bulgaria, CH & LI Switzerland ark, EE Estonia, ES Spain, FI Finland, FR F rg, MC Monaco, NL Netherlands, PT Portugach is a Contracting State of the European Pat	al, SE Sweden, SI Slovenia, SK Slovakia, ent Convention and of the PCT
OAPI Patent: BF Burkina Faso, I GA Gabon, GN Guinea, GQ Equa TD Chad, TG Togo, and any other of protection or treatment desired, s	BJ Benin, CF Central African Republic, CG of torial Guinea, GW Guinea-Bissau, ML Mali, State which is a member State of OAPI and a pecify on dotted line)	MR Mauritania, NE Niger, SN Senegal, Contracting State of the PCT (if other kind
National Patent (if other kind of protection	or treatment desired, specify on dotted line):	
AE United Arab Emirates	IXI : CM Gambia .	NZ New Zealand
AG Antigua and Barbuda	HR Croatia	🔀 OM Oman
A Albania	TITI Ummany	PH Philippines
AM Armenia	ID Indonesia	PL Poland
i	WI II Icrael	PT Portugal
Al Australia		
I NGA	PXI IS Iceland	ALL TEASSIERS
AZ Azerbaijan	LAI IP ISTAT	
re-de	IMI K K PNV2	<b>22</b> 50 50 50 50 50 50 50 50 50 50 50 50 50
BB Barbados	KC Kyrovzstan	SD Sudan
■ BG Bulgaria BR Brazil	IXI ICP Democratic People's Reducite	BEER OF STREET
		SG Singapore
BY Belarus	TEL IND Domiblio of Korea	SK Slovakia
BZ Belize	X KZ Kazakhstan	
-X-CA Canada	X C Spiret I voia	TJ Tajikistan
CH & LI Switzerland and Liechtenstein	X X Z S-i I onka	X TM Turkmenistan
CN China		X TN Tunisia
🔀 CO Colombia	☑ LR Liberia	TR Turkey
CR Costa Rica	LS Lesotho	TT Trinidad and Tobago
TO CIT Cuba	LT Lithuania	
X CZ. Czech Republic	. LU Luxembourg	X TZ United Republic of Tanzania
EX. DO	IXI T.V Latvia	
DK Denmark	MA Morocco	II TIC Ticanda
DM Dominica	MD Republic of Moldova	☑ US United States of America
DZ Algeria		ST OB Omica parces of the state
		TIV Tichekistan
EE Estonia	MK The former Yugoslav Republic of	VC Saint Vincent and the Grenadine
) 🚐	Macedonia	The Total Taxon Ta
FI Finland		VI VIV Viet Nam
CB United Kingdom	MWMalawi	YU Yugoslavia
- 1	MX Mexico	ZA South Africa
IV CT Coordin	MZ Mozambique	ZW Zimbabwe
GH Ghana	NO Norway	ZW Zimbabwe
	1:11 Language and to the PCT	after issuance of this sheet:
Check-boxes below reserved for designation	ng States which have become party to the PCT	
NICARAGUA	States which have become party to the FOY	
		. 🗀 ;
Precautionary Designation Statement: other designations which would be permit excluded from the scope of this statement.	In addition to the designations made above, the dunder the PCT except any designation(s). The applicant declares that those additional desfore the expiration of 15 months from the prior to the Confirmation (including fees) must reach the second	ne applicant also makes under Rule 4.9(0) a indicated in the Supplemental Box as bein signations are subject to confirmation and the standard is to be regarded as withdrawn by the standard as withdrawn by the standard standard in the standard standard in the standard stand
applicant at the expiration of that time time	. (00)	

Sheet No.	4 .

Box No. VI PRIORITY	CLAIM		·	
The priority of the following	earlier application(s) is hereb	· · · · · · · · · · · · · · · · · · ·		
Filing date	Number	W	There earlier application	is:
of earlier application (day/month/year)	of earlier application	national application: country or Member of WTO	regional application:* regional Office	international application: receiving Office
item (1) 17/04/2002 17th April 2002	0208768.2	UNITED KINGDOM		
item (2)				
item (3)				
item (4)				
item (5)				
Further priority claims	are indicated in the Supplement	ental Box.		
if the earlier application was above as:  * Where the earlier applicat Industrial Property or one Management of the search of th	ion is an ARIPO application, in Member of the World Trade Of the World Trade Of TIONAL SEARCHING AU the carching Authority (ISA) (if the the Authority chosen; the two the Authority chosen; the two the the Authority chosen; the two the the Authority chosen; the two	item (3) item  item (3) item  item  item (3) item  ite	(4) item (5)  y party to the Paris Convearlier application was f	other, see Supplemental Box vention for the Protection of iled (Rule 4.10(b)(ii)):
Box No. VIII DECLARA	ATIONS			
The following declaration check-boxes below and indi	s are contained in Boxes Nos cate in the right column the nu	s. VIII (i) to (v) (mark the umber of each type of decla	applicable ration):	Number of declarations
Box No. VIII (i)	Declaration as to the ident			:
Box No. VIII (ii)	Declaration as to the appl date, to apply for and be	licant's entitlement, as at t granted a patent	he international filing	:
Box No. VIII (iii)	date, to claim the priorit	olicant's entitlement, as at y of the earlier application	n	:
Box No. VIII (iv)	Declaration of inventorsh United States of America	nip (only for the purposes	of the designation of the	:
Box No. VIII (v)	Declaration as to non-pre	ejudicial disclosures or exc	ceptions to lack of novel	ty :

		_
		~
Sheet No.		_
Angel IVO		

Box No. IX CHECK LIST; LANGUAGE C	of filing			
This international application contains:  (a) in paper form, the following number of	This international application is accompanied by the following item(s) (mark the applicable check-boxes below and indicate in right column the number of each item):	Number of items		
sheets: request (including	1. 🔀 fee calculation sheet	:		
declaration sheets) : 5	2.  original separate power of attorney	:		
description (excluding	3. Original general power of attorney	:		
sequence listings and/or tables related thereto) : 25	4. copy of general power of attorney; reference number, if any:	. :		
claims 4	5. statement explaining lack of signature	:		
abstract : 1	6 D priority document(s) identified in Box No. VI as	į		
drawings : 7	item(s):	. :		
Sub-total number of sheets : 42 sequence listings	7. ☐ translation of international application into (language):	. :		
tables related thereto (for both, actual number of	8. separate indications concerning deposited microorganism or other biological material	:		
sheets if filed in paper form, whether or not also filed in	9. sequence listings in computer readable form (indicate type and number of carriers)	!		
computer readable form; see (c) below)	<ul> <li>(i) ☐ copy submitted for the purposes of international search und Rule 13ter only (and not as part of the international applica</li> </ul>	er tion):		
Total number of sheets : 42	(ii) (only where check-box (b)(i) or (c)(i) is marked in left column) additional copies including, where applicable, the copy for purposes of international search under Rule 13ter	the		
(b) only in computer readable form (Section 801(a)(i))	purposes of international search under Rule 13ter	:		
(i) sequence listings	(iii) together with relevant statement as to the identity of the copcopies with the sequence listings mentioned in left column	; ;		
(ii) ☐ tables related thereto (c) ☐ also in computer readable form	10.  tables in computer readable form related to sequence listings (indicate type and number of carriers)			
(Section 80Î(a)(ii)) (i) sequence listings	(i) copy submitted for the purposes of international search und Section 802(b-quater) only (and not as part of the international search under the contraction of the international search under the contraction of the international search under the contraction of	ler onal		
(ii) tables related thereto	application)	;		
Type and number of carriers (diskette, CD-ROM, CD-R or other) on which are contained the	(ii) (only where check-box (b)(ii) or (c)(ii) is marked in left column additional copies including, where applicable, the copy for purposes of international search under Section 802(b-guate	er):		
sequence listings:	(iii) I together with relevant statement as to the identity of the co	py or .		
tables related thereto:	copies with the tables mentioned in left column			
(additional copies to be indicated under items 9(ii) and/or 10(ii), in right column)	11.  other (specify):			
Figure of the drawings which should accompany the abstract:	Language of filing of the international application:			
Box No. X SIGNATURE OF APPLICAN	T, AGENT OR COMMON REPRESENTATIVE	ding the request).		
Next to each signature, indicate the name of the person signature.  DR P-G-BANFORD	1, AGERT OR COMMISSION AND A STATE OF THE PROPERTY OF THE PROP			
The state of the s				
Por receiving Office use only				
Date of actual receipt of the purported international application:		received:		
<ol> <li>Corrected date of actual receipt due to later timely received papers or drawings complethe purported international application:</li> </ol>	but ing			
4. Date of timely receipt of the required corrections under PCT Article 11(2):		not received: .		
5. International Searching Authority (if two or more are competent): ISA /	6. Transmittal of search copy delayed until search fee is paid			
	For International Bureau use only			
Date of receipt of the record copy by the International Bureau:				

Patents Act 1977 Rules 6, 52, 119

# The Patent Office



## Request for certificate of the Comptroller or a certified or uncertified copy from a file or the register (See the notes on the back of this form)

The Patent Office

Cardiff Road Newport Gwent NP9 1RH

1.	Your reference	PCB/P89103PWO
<u> </u>		0000769.0
2.	Patent application or patent number(s)	0208768.2
	(see notes (c) & (d))	
3.	Full name of the or of each applicant or	THE UNIVERSITY OF NEWCASTLE
	proprietor	
	(if known)	
	·	
	Titl -4 1	AN APPLICATION AS FILED
4.	What do you want a copy of? (See note (f))	AN AFFLICATION AS FILLED
<del></del> 5.	How many copies do you need?	1
	220 Williams Coperation of the Committee	
6.	State the type of certificate you want	CERTIFIED WITH SIGNATURE AND SEAL:
	(see note (g)) and if it is needed to support	COPY FOR USE IN CONNECTION WITH A
	applications made outside the United	PCT APPLICATION.
•	Kingdom, list the countries concerned	
	(see notes (j) & (k))	
7.	Name, address and postcode of the or of each	MARKS & CLERK, 43 PARK PLACE,
	person making this request	LEEDS,
	(see note (b))	LS1 2RY, UNITED KINGDOM
-		·
8.	Name, address and postcode of the or of each	SEND TO THE INTERNATIONAL UNIT AS
	person certificates or copies should be sent to	PRIORITY DOCUMENTS FOR PCT PATENT
	(if different from that given in part 6 above)	APPLICATION NO.
	(see note (i))	
•	(222.022.10)	n 1
•		
9.	Sign	nature Date
		//V // / V \
	· · · · · · · · · · · · · · · · · · ·	n · · ·
	•	MARKS & CLERK 14/04/03
10.	Name and daytime telephone number of	<u>MARKS &amp; CLERK</u> 14/04/03
10.	Name and daytime telephone number of person to contact in the United Kingdom DR	<u>MARKS &amp; CLERK</u> 14/04/03  P. C. BANFORD – 0113 3895606

#### From the INTERNATIONAL BUREAU

### PCT

NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence).

To:

BANFORD, P., C. Marks & Clerk

43 Park Place

Leeds LS1 2RY ROYAUME-UNI

Date of mailing (day/month/year)
23 October 2003 (23.10.03)

Applicant's or agent's file reference PCB/P89103PWO ✓

IMPORTANT NOTICE

International application No. PCT/GB03/01623

International filing date (day/month/year) 15 April 2003 (15.04.03)

Priority date (day/month/year) 17 April 2002 (17.04.02)

Applicant

THE UNIVERSITY OF NEWCASTLE et al

 Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this notice:

AU, AZ, BY, CH, CN, CO, DE, DZ, HU, JP, KG, KP, KR, MD, MK, MZ, RU, TM, US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

The following designated Offices have waived the requirement for such a communication at this time:

AE, AG, AL, AM, AP, AT, BA, BB, BG, BR, BZ, CA, CR, CU, CZ, DK, DM, EA, EC, EE, EP, ES, FI, GB, GD, GE, GH, GM, HR, ID, IL, IN, IS, KE, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MG, MN, MW, MX, NI, NO, NZ, OA, OM, PH, PL, PT, RO, SC, SD, SE, SG, SK, SL, TJ, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

- Enclosed with this notice is a copy of the international application as published by the International Bureau on 30 October 2003 (30.10.03) under No. 03/089637
- 4. TIME LIMITS for filing a demand for international preliminary examination and for entry into the national phase

The applicable time limit for entering the national phase will, subject to what is said in the following paragraph, be 30 MONTHS from the priority date, not only in respect of any elected Office if a demand for international preliminary examination is filed before the expiration of 19 months from the priority date, but also in respect of any designated Office, in the absence of filing of such demand, where Article 22(1) as modified with effect from 1 April 2002 applies in respect of that designated Office. For further details, see *PCT Gazette* No. 44/2001 of 1 November 2001, pages 19926, 19932 and 19934, as well as the *PCT Newsletter*, October and November 2001 and February 2002 issues.

In practice, time limits other than the 30-month time limit will continue to apply, for various periods of time, in respect of certain designated or elected Offices. For regular updates on the applicable time limits (20, 21, 30 or 31 months, or other time limit), Office by Office, refer to the PCT Gazette, the PCT Newsletter and the PCT Applicant's Guide, Volume II, National Chapters, all available from WIPO's Internet site, at http://www.wipo.int/pct/en/index.html.

For filing a demand for international preliminary examination, see the PCT Applicant's Guide, Volume VA, Chapter IX. Only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination (at present, all PCT Contracting States are bound by Chapter II).

It is the applicant's sole responsibility to monitor all these time limits.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

Judith Zahra

Facsimile No.(41-22) 740.14.35

Telephone No.(41-22) 338.91.11

Form PCT/IB/308 (April 2002)